

11. Rosa

Program Name: Rosa.java

Input File: rosa.dat

Rosa called last night and needs a program that takes two sets of data and compares an item in both sets of data. The data will have three fields separated by a comma. Each field could be a key. Finally, the key she wants to compare could change each time. The first line of data is the header information.

When comparing the data, she really doesn't tell you what she wants, so you decide you will give her three items of information: what is missing from the second file but is contained in the first file, what is missing from the first file but is contained in the second file, and what is different between the two files.

The key she gives you is guaranteed to be unique in the data.

Input: The first line is the number of data sets. This will be followed by the key Rosa wants to use to compare. The next line will be the name of the file. The following line will be three possible keys separated by commas (Note: Both files' keys will always be in the same order). This will then be followed by an unknown amount of data and will end with "EOF". After EOF the next file will be entered, following same format as first file (file name, keys separated by commas, then data).

Output: Will have three basic items for each data set, as described below. Note **bolded text** represents each file name, and *italics* represent information. Normal text is exact.

First_File_Name Missing from **Second_File_Name**

All data contained in first file, but not second file, sorted by first file key

Second_File_Name Missing from **First_File_Name**

All data contained in second file, but not first file, sorted by second file key

Difference between Files

All data different between the files, sorted by key first, then information from first file, then information from second file.

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Rosa (continued)

Sample Input

```

2
One
FILE 1
One,two,three
4,bob,can
7,house,short
8,goof,short
EOF
FILE 2
One,two,three
4,bob,can
7,course,crank
9,hobbit,googball
EOF
H2
FILE A
H1,H2,H3
Airhead,A,Can
Dog,D,Here
UIL,U,Bob
EOF
FILE B
H1,H2,H3
Dog,D,Here
Airhead,A,Hook
UIL,U,Canister
Wha,W,Waycar
Habbit,H,Honolulu
EOF
    
```

Sample Output

```

File 1 Missing from File 2
8,goof,short
File 2 Missing from File 1
9,hobbit,googball
Difference between Files
7,house,short
7,course,crank
File A Missing from File B
File B Missing from File A
Habbit,H,Honolulu
Wha,W,Waycar
Difference between Files
Airhead,A,Can
Airhead,A,Hook
UIL,U,Bob
UIL,U,Canister
    
```